



## In the United States Patent and Trademark Office

Appellants :	Darryl F. Clark et al.	Docket No.:	14207
Serial No.:	09/742,830	Group:	1771
Confirmation No:	8827	Examiner:	C. Pratt
Filed:	December 20, 2000	Date:	September 23, 2003
For:	Fine Denier Multicomponent Fibers		

### Brief on Appeal to the Board of Patent Appeals and Interferences

MAIL STOP APPEAL BRIEF – PATENTS  
COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
Alexandria, Virginia 22313-1450

Sir:

Pursuant to 37 C.F.R. 1.192, Appellants respectfully submit this Brief in support of their Appeal of the Examiner's **Final Rejection** of claims 1-10 mailed on March 21, 2003.

On June 23, 2003, (June 21, 2003 was a Saturday), Appellants, pursuant to 37 C.F.R. 1.191, timely mailed a Notice of Appeal. Thus, the time period for filing this Brief ends on August 23, 2003. Filed concurrently herewith is a Petition for a one-month Extension of Time, thereby extending the due date for filing this Appeal Brief until September 23, 2003.

In accordance with 37 C.F.R. 1.192(a), this Appeal Brief is filed in triplicate.

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The present Application has been assigned to Kimberly-Clark Worldwide, Inc.

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#### Related Appeals and Interferences

At this time, the Appellants, Assignee, and Appellants' representative are not aware of any related appeals or interferences which will directly affect or will be directly affected by or have a bearing on the Board's decision in this pending appeal.

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**Status of the Claims**

Claims 1-9 and 21 remain in the application. Claims 1-9 and 21 stand finally rejected. Claims 10-20 have been cancelled.

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**Status of Amendments Filed Subsequent to Final Rejection**

The amendment filed on May 12, 2003, subsequent to the Final Rejection, was entered by the Examiner. This amendment canceled claim 10-20 and added claim 21. Claim 21 is claim 10 redrafted in independent form.

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**Summary of the Invention**

The present invention is directed to a thermoplastic polymer fabric comprising a plurality of continuous multicomponent filaments having a denier of less than about 3. The multicomponent filaments comprises a first polymeric component having a melt-flow rate of at least 150g/ 10 minutes and a second polymeric component having a melt-flow rate at least about 65% less than the melt-flow rate of the first polymeric component. Stated another way, the second polymeric component has a melt-flow rate which less than about 35% of the melt-flow rate of the first polymeric component. For example, if the first polymeric component has a melt-flow rate of 150g/ 10 minutes, the melt-flow rate of the second polymeric component must be less than about 52.5g/ 10 minutes. Further, the present invention provides that the second polymer component comprises a majority of the outer surface of the multicomponent filament. As set forth in the specification and the claims, the present invention further provides a nonwoven fabric where the second polymeric component of the multicomponent filaments has a melt-flow rate at least about 75% less than the melt-flow rate of the first polymeric component (claim 2). The present invention even further provides a nonwoven fabric where the second polymeric component of the multicomponent fibers has a melt-flow rate at least about 85% less than the melt-flow rate of the first polymeric component (claim 3).

As is set forth on page 2 of the present specification, polymeric components for multicomponent filaments typically have melt-flow rates which are relatively similar. In clear contrast to what is shown in the prior art, the melt-flow rates of the polymers used to produce the thermoplastic polymer fabric of the present invention are vastly different, where one of the polymers has a high melt-flow rate relative to the second polymer and the melt-flow rate of the first polymer is greater than 150 g/10 min. (claim 1) or preferably greater than 200 g/10 min. (claim 8).

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**The Issues Presented**

The following issues are presented for review:

1. Whether the Examiner erred in rejecting Claims 1-4, 6-9, and 21 under 35 USC § 102(b) as being anticipated by U.S. Patent 5,672,415 to Sawyer et al.
2. Whether the Examiner erred in rejecting Claims 1-4, 6-9, and 21 under 35 USC § 102(e) as being anticipated by U.S. Patent 6,420,285 to Newkirk et al.
3. Whether the Examiner erred in rejecting Claim 5 under 35 USC § 103 as being obvious over U.S. Patent 5,672,415 to Sawyer et al. in view of U.S. Pat. No. 5,935,883 to Pike and U.S. Pat. No. 5,759,926 to Pike et al.
4. Whether the Examiner erred in rejecting Claim 5 under 35 USC § 103 as being obvious over U.S. Patent 6,420,285 to Newkirk et al. in view of U.S. Pat. No. 5,935,883 to Pike and U.S. Pat. No. 5,759,926 to Pike et al.

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**Grouping of the Claims**

Claims 1-4 and 6-9 stand or fall together as they relate to Issues 1 and 2 above.

Claim 5 stands alone as it relates to Issues 3 and 4 above.

Claim 21 stands alone as it relates to Issues 1 and 2 above.

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**Argument****Issue 1**

Claims 1-4, 6-9, and 21 are novel and are patentable over U.S. Patent 5,672,415 to Sawyer et al.

Claim 1 is directed to a thermoplastic polymer fabric comprising a plurality of continuous multicomponent filaments having a denier of less than about 3. The multicomponent filaments comprises a first polymeric component having a melt-flow rate of at least 150g/ 10 minutes and a second polymeric component having a melt-flow rate at least about 65% less than the melt-flow rate of the first polymeric component. Stated another way, the second polymeric component has a melt-flow rate which less than about 35% of the melt-flow rate of the first

polymeric component. For example, if the first polymeric component has a melt-flow rate of 151g/ 10 minutes, the melt-flow rate of the second polymeric component must be less than about 52.8g/ 10 minutes. Claim 1 further requires that the second polymer component comprises a majority of the outer surface of the multicomponent filament. Further, claim 2 requires that the second polymeric component have a melt-flow rate at least about 75% less than the melt-flow rate of the first polymeric component and claim 3 requires that the second polymeric component have a melt-flow rate at least about 85% less than the melt-flow rate of the first polymeric component.

In the statement of the rejection based on Sawyer et al., the Examiner does not address how all of the limitations of the claims are met by Sawyer et al. In particular the Examiner does not address how the limitation requiring that the second polymeric component have a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component is taught by Sawyer et al. The Examiner merely states that the melt-flow rates taught by Sawyer et al. are within Appellants' claimed ranges, pointing to col. 3, lines 35-45 of Sawyer et al.

In the Final Rejection, the Examiner states that Sawyer et al. teaches a first polymer comprising polypropylene having a melt flow rate of 800 g/10 min. and a second polymer having a melt flow rate of 60 g/10min. However, in order to arrive at this, the Examiner must pick and choose from the teaching of Sawyer et al. It is well established in U.S. Patent Law, that when a prior art reference teaches a range within, overlapping or touching the claimed range, the prior art only anticipates the claimed range if the claimed range is disclosed by the reference with "sufficient specificity". See MPEP 2131.03. Also see *Ex Parte Lee*, 31 USPQ 2d 1105 (Bd. of Appeals (1993)). The Examiner has never addressed the question of "sufficient specificity" of the Sawyer reference and merely states that the Applicant's claimed melt flow ratio of the first polymer component to the second polymer component is within the ranges of melt flow rates taught in Sawyer.

Appellants point out there are numerous melt flow rates for each polymer disclosed by Sawyer et al. which fall outside the claimed ratio; however, there are a few that may fall within the claimed ratio. Appellants' submit that one skilled in the art would not immediately envisage the presently claimed melt flow rate ratios from the disclosure of Sawyer, especially since the preferred melt flow rates for the polypropylene and the polyethylene polymer in Sawyer are not within the Appellants' claims. This is especially true for the limitations of claim 8, which require the first polymer to have a melt flow rate greater than 200 g/10 min and the second polymer to

have a melt flow rate less than about 50 g/10 min. These claim ranges are outside the disclosures of Sawyer et al.

Further, it has been held that one may only look to the preferred embodiment of a prior art reference to determine if the reference anticipates a claim. *In re Petering*, 133 USPQ 275 (CCPA 1962). It has also been held that a reference anticipates a claim if there is a limited disclosure to species. Further it has been held that a reference disclosing a large number of species cannot anticipate a claim to a specific species. See *Akzo N.V. International Trade Commission*, 1 USPQ 2d 1241 (Fed. Cir. 1986).

As can be seen above, a large general disclosure cannot anticipate a claim to a specific embodiment. In the present application, while the generic ranges for the melt flow rate for the polypropylene polymer and the polyethylene polymer may overlap the Appellants' claims, in some aspects of the claimed ratio, the broad disclosure does not direct one skilled in the art to select melt flow rates for one polymer to be at least 150 g/10 min. and select a second polymer have a melt flow rate which is at least 65% less than the first polymer. In order for one skilled in the art to arrive at the claimed invention, one would have to first select the first polymer to have a melt flow rate of at least 150 g/10 min., after making the selection of the first polymer, one skilled in the art would have to select the second polymer such that the melt flow rate is 65%, 75% or 85% less than the melt flow rate of the first polymer. Clearly, there is no disclosure in Sawyer which directs one skilled in the art to make such a selection. In fact, one skilled in the art reading the entire disclosure of Sawyer et al., would be directed by Sawyer et al. to select a polyethylene polymer having a melt flow rate in the range between about 100 to about 200 g/10 min. and a polypropylene polymer having a melt flow rate between about 60 and about 200 g/10 min, which is a desired range, but not most desired range, for the polyethylene and polypropylene polymers disclosed by Sawyer et al. One skilled in the art would be directed to use a polyethylene polymer having a melt flow rate in the range between about 125 to about 175 g/10 min. and a polypropylene polymer having a melt flow rate between about 75 and about 150 g/10 min, which is the most desired range, for the polyethylene and polypropylene polymers disclosed by Sawyer et al.

The only way one skilled in the art would arrive at the claimed invention would be to pick and choose from the teachings of Sawyer et al. One would pick and choose the specific values from Sawyer et al. only after having benefit of reading the Appellants' specification. Nothing in Sawyer et al. directs one skilled in the art to the presently claims invention.

With respect to claim 8, the Examiner finds that the claim is anticipated in two ways. The Examiner states that the second polymer could be polypropylene and the first polymer can be polyethylene, finding that the polypropylene of Sawyer has a melt flow rate between about 50 and 800 g/10 min. and the polyethylene has a melt flow rate of about 400 g/10 min. In response, Appellants' point out that claim 8 requires that the melt flow rate of the second polymer is less than about 50 g/10 min. and the polypropylene of Sawyer has a melt flow rate of 50 g/10 min. or more. There is not an overlap and the teachings of Sawyer direct one skilled in the art to select the melt flow rate of the polypropylene to be greater than 50 g/10 min., not less than 50 g/10 min.

Second, the Examiner finds that if the second polymer of Sawyer is a polyethylene, the claim limitation "between about 60 and about 400 g/10 min" anticipates 49 g/10 min. The Examiner finds that Sawyer anticipates the claimed range of "less than about 50 g/10 min.". The Examiner is reading disclosure into Sawyer to arrive at this interpretation. Using the logic of the Examiner, a reference teaches any range if the term "about" is used to describe the limits of the range. Clearly, Sawyer does not want the polyethylene polymer to have a melt flow rate below about 60 g/10 min. Therefore, claim 8 is clearly not anticipated by Sawyer et al.

Finally, newly added claim 21 requires that the second polymer is a polyester or a polyamide, having a melt flow rate which is at least 75% less than the melt flow rate of the first polymer. Further, the polyester or polyamide must make up a majority of the surface of the multicomponent filament. The melt flow rate of the polyester and polyamide are not disclosed by Sawyer, therefore the limitations of claim 21 cannot be derived from Sawyer, even if one skilled in the art carefully picked and chose from the teachings of the reference as the Examiner has suggested. Finally, picking and choosing from the teachings of a reference does not constitute anticipation.

For the foregoing reasons, Sawyer does not anticipate claims 1-4, 6-9 and 21. Therefore, the rejection is untenable and should be reversed.

## Issue 2

Claims 1-4, and 6-10 are novel and are patentable over U.S. Patent 6,420,285 to Newkirk et al.

As is pointed out above, the present claims are directed to a thermoplastic polymer fabric comprising a plurality of continuous multicomponent filaments having a denier of less than about 3 which are prepared from multicomponent filaments comprising a first polymeric

component having a melt-flow rate of at least 150g/ 10 minutes and a second polymeric component having a melt-flow rate at least about 65% less than the melt-flow rate of the first polymeric component. Further, the second component must make-up a majority of the surface of the multicomponent filament. Newkirk et al. fails to teach at least two of these limitations of the present claims.

First, Newkirk et al. suggest that the maximum melt-flow rate or melt-flow index of the polymers used to prepare the multicomponent polymers should be less than 150 g/ 10 min. See column 12, line 11-14. Second, nothing in Newkirk et al. directs one skilled in the art to select the melt-flow rate a second polymer to be at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component, with the first polymer component having a melt-flow rate greater than 150 g/ 10 min. The polymers used in the Examples of Newkirk et al. do not meet this limitation and the Examiner has not addressed how these limitations are met by Newkirk et al. Nothing in Newkirk teaches that the polymer with the lower melt flow rate must make-up a majority of the surface area of the multicomponent filament. Further, the Examiner has not addressed here the limitations of claim 8 are met by Newkirk.

In order for a reference to anticipate a claim, all of the limitations of the claim must be taught by the reference relied upon. Given that there is not a disclosure in Newkirk et al. which teaches that a second polymer must have a melt-flow rate which is 65%, 75% or 85% less than a first polymer making up the multicomponent filaments and/or that the first polymer has a melt-flow rate greater than 150 g/min., Newkirk et al. fail to anticipate claims 1-4, 6-9 and 21. Therefore, this rejection is untenable and should be reversed.

### Issue 3

Claim 5 was rejected under 35 USC § 103 as being obvious over U.S. Patent 5,672,415 to Sawyer et al. in view of U.S. Pat. No. 5,935,883 to Pike and U.S. Pat. No. 5,759,926 to Pike et al. This rejection is untenable and should be reversed.

The Examiner relies upon Pike '883 and Pike '926 to teach that it is known in the art to prepare multicomponent filaments having a striped cross-section. While Applicants do not deny that multicomponent filaments with a striped cross-section are known in the art, Pike '883 and Pike '926 fail to remedy the deficiencies of Sawyer noted above. Specifically, the Pike references do not teach the claim limitations requiring that the second polymeric component has

a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component.

In order for a combination of references to render a claim obvious, within the meaning of 35 USC § 103, the invention “as a whole”, including all the limitation of the claims, must be taught or suggest by the combination of references. Since the combination of references does not teach the limitations of the claims requiring that the second polymeric component has a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component, the combination of the Pike references with Sawyer et al. fails to render claim 5 obvious, within the meaning of 35 U.S.C. §103. Hence this rejection should be reversed.

#### Issue 4

Claim 5 was also rejected under 35 USC § 103 as being obvious over U.S. Patent 6,420,285 to Newkirk et al. in view of U.S. Pat. No. 5,935,883 to Pike and U.S. Pat. No. 5,759,926 to Pike et al. This rejection should also be reversed.

The Examiner relies upon Pike '883 and Pike '926 to teach that it is know in the art to prepare multicomponent filaments having a striped cross-section. Pike '883 and Pike '926 fail to remedy the deficiencies of Newkirk et al. noted above. Specifically, the Pike references do not teach the claim limitations requiring that the second polymeric component has a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component and that the first polymeric component has a melt-flow rate of at least 150 g/min.

In order for a combination of references to render a claim obvious, the invention “as a whole”, including all the limitation of the claims, must be taught or suggest by the combination of references. Since the combination of references does not teach the limitations of the claims requiring that the second polymeric component has a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component and that the first polymeric component has a melt-flow rate of at least 150 g/min, the combination of the Pike references with Newkirk et al. fails to render claim 5 obvious, within the meaning of 35 USC§ 103.



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**Conclusion**


For the reasons stated above it is Appellant's position that the Examiner's rejection of claims has been shown to be untenable and should be **reversed** by the Board.

Please charge the \$320.00 fee, pursuant to 37 C.F.R. 1.17(c), for filing this Appeal Brief to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. Any additional prosecutorial fees which are due may also be charged to deposit account number 11-0875.

The undersigned may be reached at: 770-587-7204

Respectfully submitted,

Darryl F. CLARK et al.

By:   
Ralph H. Dean, Jr.  
Registration No.: 41,550

**CERTIFICATE OF MAILING**

I, Ralph H. Dean, Jr., hereby certify that on September 23, 2003 this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Mail Stop Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450

By:   
Ralph H. Dean, Jr.

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## Appendix – The Claims On Appeal

1. A thermoplastic polymer fabric comprising:

a plurality of continuous multicomponent filaments having a denier less than about 3 and comprising a first polymeric component and a second polymeric component wherein said second polymeric component comprises a majority of the outer surface of said multicomponent filament;

said first polymeric component having been made from a first thermoplastic polymer having a melt-flow rate of at least 150 g/10 minutes;

said second polymeric component having been made from a second thermoplastic polymer having a melt-flow rate at least about 65% less than the melt-flow rate of the first thermoplastic polymer.

2. The thermoplastic polymer fabric of claim 1 wherein said second thermoplastic polymer has a melt-flow rate at least about 75% less than the melt-flow rate of the first thermoplastic polymer.

3. The thermoplastic polymer fabric of claim 1 wherein said second thermoplastic polymer has a melt-flow rate at least about 85% less than the melt-flow rate of the first thermoplastic polymer.

4. The thermoplastic polymer fabric of claim 2 wherein said multicomponent filament is a bicomponent filament and has a sheath-core cross-sectional configuration wherein the second polymer comprises the sheath and further wherein the sheath component comprises substantially the entire outer surface of the multicomponent filament.

5. The thermoplastic polymer fabric of claim 2 wherein said multicomponent filament has a striped cross-sectional configuration wherein the first polymer component is positioned between said second polymeric component and a third polymeric component; said third polymeric component comprises a polymer having a melt-flow rate similar to that of said second polymer.

6. The thermoplastic polymer fabric of claim 2 wherein said first polymer comprises a propylene polymer and said second polymer comprises an ethylene polymer.

7. The thermoplastic polymer fabric of claim 2 wherein said first polymer comprises a propylene polymer and said second polymer comprises a propylene polymer.

8. The thermoplastic polymer fabric of claim 1 wherein said first polymer comprises a first olefin polymer having a melt-flow greater than 200 g/10 minutes and wherein said second polymer comprises an olefin polymer having a melt-flow rate less than about 50 g/10 minutes.

9. The thermoplastic polymer fabric of claim 8 wherein said thermoplastic polymer fabric comprises spunbond fibers.

Claims 10-20 have been canceled.

21. A thermoplastic polymer fabric comprising:

a plurality of continuous multicomponent filaments having a denier less than about 3 and comprising a first polymeric component and a second polymeric component wherein said second polymeric component comprises a majority of the outer surface of said multicomponent filament;

said first polymeric component having been made from a first thermoplastic polymer having a melt-flow rate of at least 150 g/10 minutes;

said second polymeric component having been made from a second thermoplastic polymer having a melt-flow rate at least about 65% less than the melt-flow rate of the first thermoplastic polymer.



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**Summary of the Invention**

The present invention is directed to a thermoplastic polymer fabric comprising a plurality of continuous multicomponent filaments having a denier of less than about 3. The multicomponent filaments comprises a first polymeric component having a melt-flow rate of at least 150g/ 10 minutes and a second polymeric component having a melt-flow rate at least about 65% less than the melt-flow rate of the first polymeric component. Stated another way, the second polymeric component has a melt-flow rate which less than about 35% of the melt-flow rate of the first polymeric component. For example, if the first polymeric component has a melt-flow rate of 150g/ 10 minutes, the melt-flow rate of the second polymeric component must be less than about 52.5g/ 10 minutes. Further, the present invention provides that the second polymer component comprises a majority of the outer surface of the multicomponent filament. As set forth in the specification and the claims, the present invention further provides a nonwoven fabric where the second polymeric component of the multicomponent filaments has a melt-flow rate at least about 75% less than the melt-flow rate of the first polymeric component (claim 2). The present invention even further provides a nonwoven fabric where the second polymeric component of the multicomponent fibers has a melt-flow rate at least about 85% less than the melt-flow rate of the first polymeric component (claim 3).

As is set forth on page 2 of the present specification, polymeric components for multicomponent filaments typically have melt-flow rates which are relatively similar. In clear contrast to what is shown in the prior art, the melt-flow rates of the polymers used to produce the thermoplastic polymer fabric of the present invention are vastly different, where one of the polymers has a high melt-flow rate relative to the second polymer and the melt-flow rate of the first polymer is greater than 150 g/10 min. (claim 1) or preferably greater than 200 g/10 min. (claim 8).

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The following issues are presented for review:

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Claims 1-4 and 6-9 stand or fall together as they relate to Issues 1 and 2 above.

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## **Argument**

### Issue 1

Claims 1-4, 6-9, and 21 are novel and are patentable over U.S. Patent 5,672,415 to Sawyer et al.

Claim 1 is directed to a thermoplastic polymer fabric comprising a plurality of continuous multicomponent filaments having a denier of less than about 3. The multicomponent filaments comprises a first polymeric component having a melt-flow rate of at least 150g/ 10 minutes and a second polymeric component having a melt-flow rate at least about 65% less than the melt-flow rate of the first polymeric component. Stated another way, the second polymeric component has a melt-flow rate which less than about 35% of the melt-flow rate of the first

polymeric component. For example, if the first polymeric component has a melt-flow rate of 151g/ 10 minutes, the melt-flow rate of the second polymeric component must be less than about 52.8g/ 10 minutes. Claim 1 further requires that the second polymer component comprises a majority of the outer surface of the multicomponent filament. Further, claim 2 requires that the second polymeric component have a melt-flow rate at least about 75% less than the melt-flow rate of the first polymeric component and claim 3 requires that the second polymeric component have a melt-flow rate at least about 85% less than the melt-flow rate of the first polymeric component.

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Appellants point out there are numerous melt flow rates for each polymer disclosed by Sawyer et al. which fall outside the claimed ratio; however, there are a few that may fall within the claimed ratio. Appellants' submit that one skilled in the art would not immediately envisage the presently claimed melt flow rate ratios from the disclosure of Sawyer, especially since the preferred melt flow rates for the polypropylene and the polyethylene polymer in Sawyer are not within the Appellants' claims. This is especially true for the limitations of claim 8, which require the first polymer to have a melt flow rate greater than 200 g/10 min and the second polymer to

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As can be seen above, a large general disclosure cannot anticipate a claim to a specific embodiment. In the present application, while the generic ranges for the melt flow rate for the polypropylene polymer and the polyethylene polymer may overlap the Appellants' claims, in some aspects of the claimed ratio, the broad disclosure does not direct one skilled in the art to select melt flow rates for one polymer to be at least 150 g/10 min. and select a second polymer have a melt flow rate which is at least 65% less than the first polymer. In order for one skilled in the art to arrive at the claimed invention, one would have to first select the first polymer to have a melt flow rate of at least 150 g/10 min., after making the selection of the first polymer, one skilled in the art would have to select the second polymer such that the melt flow rate is 65%, 75% or 85% less than the melt flow rate of the first polymer. Clearly, there is no disclosure in Sawyer which directs one skilled in the art to make such a selection. In fact, one skilled in the art reading the entire disclosure of Sawyer et al., would be directed by Sawyer et al. to select a polyethylene polymer having a melt flow rate in the range between about 100 to about 200 g/10 min. and a polypropylene polymer having a melt flow rated between about 60 and about 200 g/10 min, which is a desired range, but not most desired range, for the polyethylene and polypropylene polymers disclosed by Sawyer et al. One skilled in the art would be directed to use a polyethylene polymer having a melt flow rate in the range between about 125 to about 175 g/10 min. and a polypropylene polymer having a melt flow rated between about 75 and about 150 g/10 min, which is the most desired range, for the polyethylene and polypropylene polymers disclosed by Sawyer et al.

The only way one skilled in the art would arrive at the claimed invention would be to pick and choose from the teachings of Sawyer et al. One would pick and choose the specific values from Sawyer et al. only after having benefit of reading the Appellants' specification. Nothing in Sawyer et al. directs one skilled in the art to the presently claims invention.



With respect to claim 8, the Examiner finds that the claim is anticipated in two ways. The Examiner states that the second polymer could be polypropylene and the first polymer can be polyethylene, finding that the polypropylene of Sawyer has a melt flow rate between about 50 and 800 g/10 min. and the polyethylene has a melt flow rate of about 400 g/10 min. In response, Appellants' point out that claim 8 requires that the melt flow rate of the second polymer is less than about 50 g/10 min. and the polypropylene of Sawyer has a melt flow rate of 50 g/10 min. or more. There is not an overlap and the teachings of Sawyer direct one skilled in the art to select the melt flow rate of the polypropylene to be greater than 50 g/10 min., not less than 50 g/10 min.

Second, the Examiner finds that if the second polymer of Sawyer is a polyethylene, the claim limitation "between about 60 and about 400 g/10 min" anticipates 49 g/10 min. The Examiner finds that Sawyer anticipates the claimed range of "less than about 50 g/10 min.". The Examiner is reading disclosure into Sawyer to arrive at this interpretation. Using the logic of the Examiner, a reference teaches any range if the term "about" is used to describe the limits of the range. Clearly, Sawyer does not want the polyethylene polymer to have a melt flow rate below about 60 g/10 min. Therefore, claim 8 is clearly not anticipated by Sawyer et al.

Finally, newly added claim 21 requires that the second polymer is a polyester or a polyamide, having a melt flow rate which is at least 75% less than the melt flow rate of the first polymer. Further, the polyester or polyamide must make up a majority of the surface of the multicomponent filament. The melt flow rate of the polyester and polyamide are not disclosed by Sawyer, therefore the limitations of claim 21 cannot be derived from Sawyer, even if one skilled in the art carefully picked and chose from the teachings of the reference as the Examiner has suggested. Finally, picking and choosing from the teachings of a reference does not constitute anticipation.

For the foregoing reasons, Sawyer does not anticipate claims 1-4, 6-9 and 21. Therefore, the rejection is untenable and should be reversed.

## Issue 2

Claims 1-4, and 6-10 are novel and are patentable over U.S. Patent 6,420,285 to Newkirk et al.

As is pointed out above, the present claims are directed to a thermoplastic polymer fabric comprising a plurality of continuous multicomponent filaments having a denier of less than about 3 which are prepared from multicomponent filaments comprising a first polymeric

component having a melt-flow rate of at least 150g/ 10 minutes and a second polymeric component having a melt-flow rate at least about 65% less than the melt-flow rate of the first polymeric component. Further, the second component must make-up a majority of the surface of the multicomponent filament. Newkirk et al. fails to teach at least two of these limitations of the present claims.

First, Newkirk et al. suggest that the maximum melt-flow rate or melt-flow index of the polymers used to prepare the multicomponent polymers should be less than 150 g/ 10 min. See column 12, line 11-14. Second, nothing in Newkirk et al. directs one skilled in the art to select the melt-flow rate a second polymer to be at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component, with the first polymer component having a melt-flow rate greater than 150 g/ 10 min. The polymers used in the Examples of Newkirk et al. do not meet this limitation and the Examiner has not addressed how these limitations are met by Newkirk et al. Nothing in Newkirk teaches that the polymer with the lower melt flow rate must make-up a majority of the surface area of the multicomponent filament. Further, the Examiner has not addressed here the limitations of claim 8 are met by Newkirk.

In order for a reference to anticipate a claim, all of the limitations of the claim must be taught by the reference relied upon. Given that there is not a disclosure in Newkirk et al. which teaches that a second polymer must have a melt-flow rate which is 65%, 75% or 85% less than a first polymer making up the multicomponent filaments and/or that the first polymer has a melt-flow rate greater than 150 g/min., Newkirk et al. fail to anticipate claims 1-4, 6-9 and 21. Therefore, this rejection is untenable and should be reversed.

### Issue 3

Claim 5 was rejected under 35 USC § 103 as being obvious over U.S. Patent 5,672,415 to Sawyer et al. in view of U.S. Pat. No. 5,935,883 to Pike and U.S. Pat. No. 5,759,926 to Pike et al. This rejection is untenable and should be reversed.

The Examiner relies upon Pike '883 and Pike '926 to teach that it is known in the art to prepare multicomponent filaments having a striped cross-section. While Applicants do not deny that multicomponent filaments with a striped cross-section are known in the art, Pike '883 and Pike '926 fail to remedy the deficiencies of Sawyer noted above. Specifically, the Pike references do not teach the claim limitations requiring that the second polymeric component has

a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component.

In order for a combination of references to render a claim obvious, within the meaning of 35 USC § 103, the invention "as a whole", including all the limitation of the claims, must be taught or suggest by the combination of references. Since the combination of references does not teach the limitations of the claims requiring that the second polymeric component has a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component, the combination of the Pike references with Sawyer et al. fails to render claim 5 obvious, within the meaning of 35 U.S.C. §103. Hence this rejection should be reversed.

#### Issue 4

Claim 5 was also rejected under 35 USC § 103 as being obvious over U.S. Patent 6,420,285 to Newkirk et al. in view of U.S. Pat. No. 5,935,883 to Pike and U.S. Pat. No. 5,759,926 to Pike et al. This rejection should also be reversed.

The Examiner relies upon Pike '883 and Pike '926 to teach that it is know in the art to prepare multicomponent filaments having a striped cross-section. Pike '883 and Pike '926 fail to remedy the deficiencies of Newkirk et al. noted above. Specifically, the Pike references do not teach the claim limitations requiring that the second polymeric component has a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component and that the first polymeric component has a melt-flow rate of at least 150 g/min.

In order for a combination of references to render a claim obvious, the invention "as a whole", including all the limitation of the claims, must be taught or suggest by the combination of references. Since the combination of references does not teach the limitations of the claims requiring that the second polymeric component has a melt-flow rate at least about 65% (claim 1), 75% (claim 2) or 85% (claim 3) less than the melt-flow rate of the first polymeric component and that the first polymeric component has a melt-flow rate of at least 150 g/min, the combination of the Pike references with Newkirk et al. fails to render claim 5 obvious, within the meaning of 35 USC§ 103.

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**Conclusion**

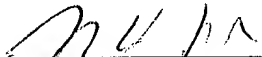
For the reasons stated above it is Appellant's position that the Examiner's rejection of claims has been shown to be untenable and should be **reversed** by the Board.

Please charge the \$320.00 fee, pursuant to 37 C.F.R. 1.17(c), for filing this Appeal Brief to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. Any additional prosecutorial fees which are due may also be charged to deposit account number 11-0875.

The undersigned may be reached at: 770-587-7204

Respectfully submitted,

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**CERTIFICATE OF MAILING**

I, Ralph H. Dean, Jr., hereby certify that on September 23, 2003 this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Mail Stop Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450

By:   
Ralph H. Dean, Jr.

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## Appendix – The Claims On Appeal

1. A thermoplastic polymer fabric comprising:

a plurality of continuous multicomponent filaments having a denier less than about 3 and comprising a first polymeric component and a second polymeric component wherein said second polymeric component comprises a majority of the outer surface of said multicomponent filament;

said first polymeric component having been made from a first thermoplastic polymer having a melt-flow rate of at least 150 g/10 minutes;

said second polymeric component having been made from a second thermoplastic polymer having a melt-flow rate at least about 65% less than the melt-flow rate of the first thermoplastic polymer.

2. The thermoplastic polymer fabric of claim 1 wherein said second thermoplastic polymer has a melt-flow rate at least about 75% less than the melt-flow rate of the first thermoplastic polymer.

3. The thermoplastic polymer fabric of claim 1 wherein said second thermoplastic polymer has a melt-flow rate at least about 85% less than the melt-flow rate of the first thermoplastic polymer.

4. The thermoplastic polymer fabric of claim 2 wherein said multicomponent filament is a bicomponent filament and has a sheath-core cross-sectional configuration wherein the second polymer comprises the sheath and further wherein the sheath component comprises substantially the entire outer surface of the multicomponent filament.

5. The thermoplastic polymer fabric of claim 2 wherein said multicomponent filament has a striped cross-sectional configuration wherein the first polymer component is positioned between said second polymeric component and a third polymeric component; said third polymeric component comprises a polymer having a melt-flow rate similar to that of said second polymer.

6. The thermoplastic polymer fabric of claim 2 wherein said first polymer comprises a propylene polymer and said second polymer comprises an ethylene polymer.

7. The thermoplastic polymer fabric of claim 2 wherein said first polymer comprises a propylene polymer and said second polymer comprises a propylene polymer.

8. The thermoplastic polymer fabric of claim 1 wherein said first polymer comprises a first olefin polymer having a melt-flow greater than 200 g/10 minutes and wherein said second polymer comprises an olefin polymer having a melt-flow rate less than about 50 g/10 minutes.

9. The thermoplastic polymer fabric of claim 8 wherein said thermoplastic polymer fabric comprises spunbond fibers.

Claims 10-20 have been canceled.

21. A thermoplastic polymer fabric comprising:

a plurality of continuous multicomponent filaments having a denier less than about 3 and comprising a first polymeric component and a second polymeric component wherein said second polymeric component comprises a majority of the outer surface of said multicomponent filament;

said first polymeric component having been made from a first thermoplastic polymer having a melt-flow rate of at least 150 g/10 minutes;

said second polymeric component having been made from a second thermoplastic polymer having a melt-flow rate at least about 65% less than the melt-flow rate of the first thermoplastic polymer.